tru|DR dx™

User Manual

sound-eklin™

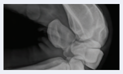
   

Table of Contents

Important Safety Information

Note

Read all the instructions before connecting or operating the component
Keep this manual so you can refer to these safety instructions.

Warning

There are no user serviceable parts inside.
Refer all servicing to qualified service personnel.

To reduce the risk of fire or electric shock, do not expose the unit to moisture or water. Do not allow foreign objects to get into the enclosure. If the unit is exposed to moisture, or a foreign object gets into the enclosure, immediately disconnect the power cord from the wall. Take the unit to a qualified service person for inspection and necessary repairs.

Caution

Heed all warnings and safety information in these instructions and on the product itself. Follow all operating instructions.

Clean the enclosure only with a dry cloth or a vacuum cleaner.

Clean the DR plate with a damp cloth. Use no chemicals or alcohol.

You must allow 10 cm or 4 inches of unobstructed clearance around the unit. Do not place the unit on a bed, sofa, rug, or similar surface that could block the ventilation slots. If the component is placed in a bookcase or cabinet, there must be ventilation of the cabinet to allow proper cooling.

Keep the component away from radiators, heat registers, stoves, or any other appliance that produces heat.

Keep the component away from flammable materials.

Place the unit on a fixed, level surface strong enough to support its weight. Do not place it on a moveable cart that could tip over.

Important Safety Information *(continued)*

Connection

The unit must be connected to a power supply only of the type and voltage specified on the rear panel of the unit.

Connect the component to the power outlet only with the supplied power supply cable or an exact equivalent. Do not modify the supplied cable in any way. Do not attempt to defeat grounding and/or polarization provisions. Do not use extension cords.

Do not route the power cord where it will be crushed, pinched, bent at severe angles, exposed to heat, or damaged in any way. Pay particular attention to the power cord at the plug and where it exits the back of the unit.

The power cord should be unplugged from the wall outlet if the unit is to be left unused for a long period of time.

When Problem Occurs

Immediately stop using the component and have it inspected and/or serviced by a qualified service agency if:

- *The power supply cord or plug has been damaged.*
- *Objects have fallen or liquid has been spilled into the unit.*
- *The unit has been exposed to rain.*
- *The unit shows signs of improper operation*
- *The unit has been dropped or damaged in any way*

CAUTION

Risk of electric shock.
Do not open.

Caution: To reduce the risk of electric shock, do not remove cover. No user-serviceable parts inside. Refer servicing to qualified service personnel.

Applicable for USA, Canada or where approved for the usage.

Caution: To prevent electric shock, match wide blade of plug to wide slot. Insert fully.

This symbol is to alert the user to important operating and maintenance (service) instructions in this manual and literature accompanying the product.

This symbol is to alert the user to the presence of uninsulated dangerous voltages inside the product's enclosure that may constitute a risk of electric shock.

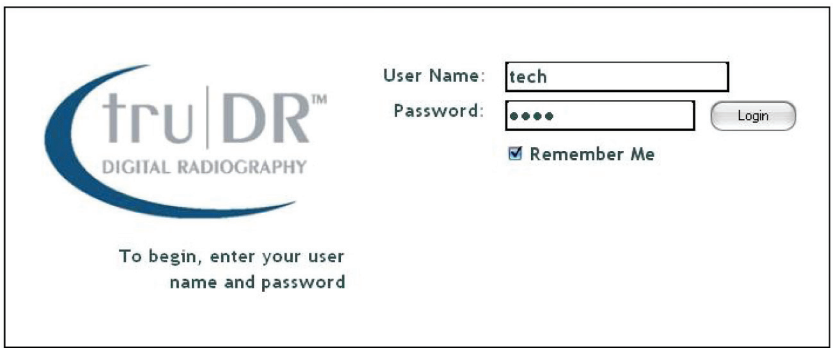
Chapter 1: Opening TruDR dx™

Open the **TruDR dx™** software to begin the process of taking a radiograph.

1. Double-click the **TruDR dx™** icon on the desktop. This will load your **TruDR dx™** software for acquiring radiographs.
2. Enter your user name and password when the login screen appears.

   Your default login is:
   User Name: tech
   Password: tech

The software will load directly into the Patient Screen if the "Remember Me" box is checked.



Chapter 2: Patient Information

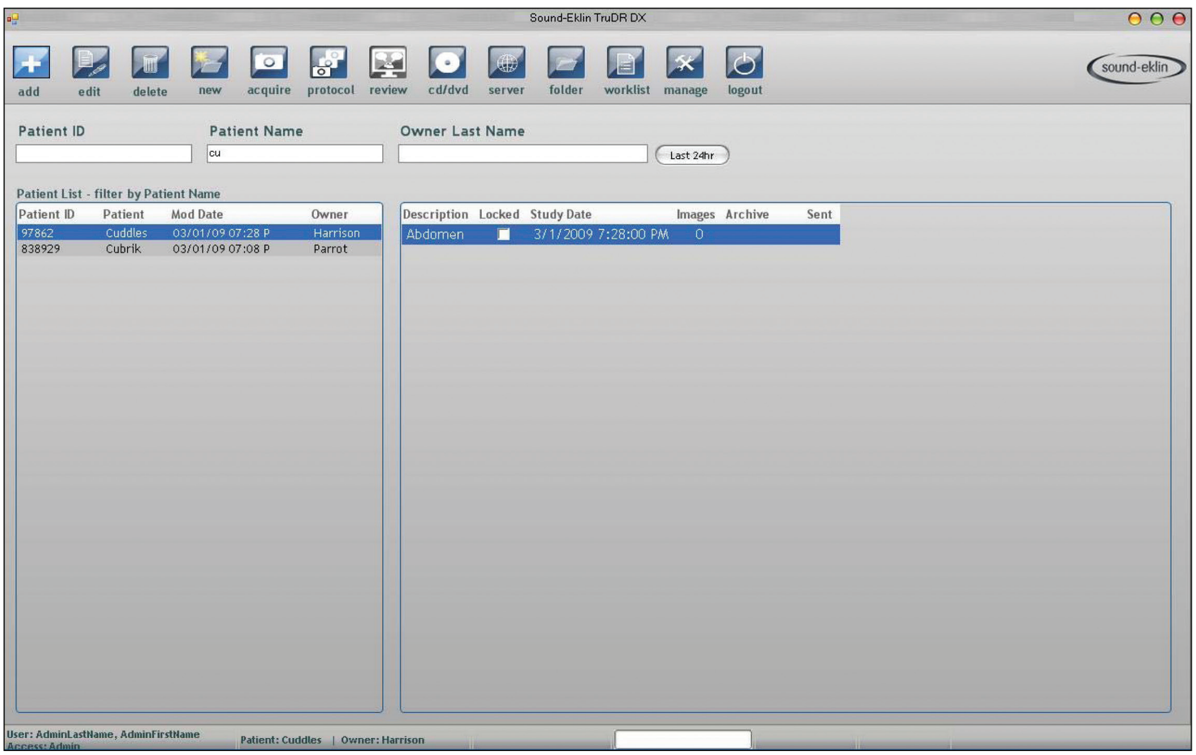
Searching and Adding Patients

Search for existing patients or add new patients easily by using the filtered search fields.

1. Search for your patient in the Patient Screen by entering the **Patient ID**, the **Patient Name**, or the **Owner Last Name**. Your patient list will automatically filter as you type.

   Patients entered within the last 24 hours are displayed in the Patient List.

2. If you do not see the patient you are searching for, click the **Add** button or press the Enter key on the keyboard to bring up the Add Patient Screen.

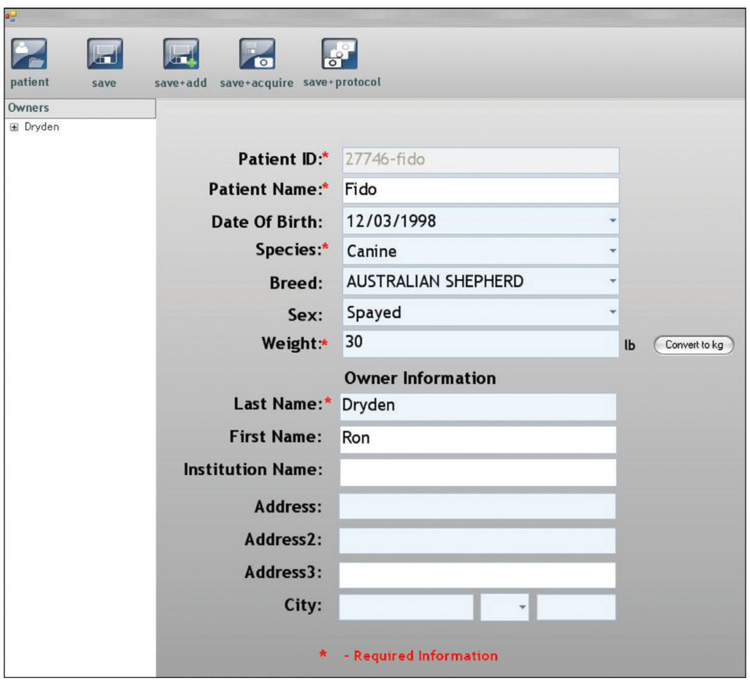


Chapter 2: Patient Information

Searching and Adding Patients *(continued)*

3. Enter your patient's information. **Patient ID, Patient Name**, **Species**, **Weight**, and **Last Name** are required fields.
4. Click one of the **Save** buttons.

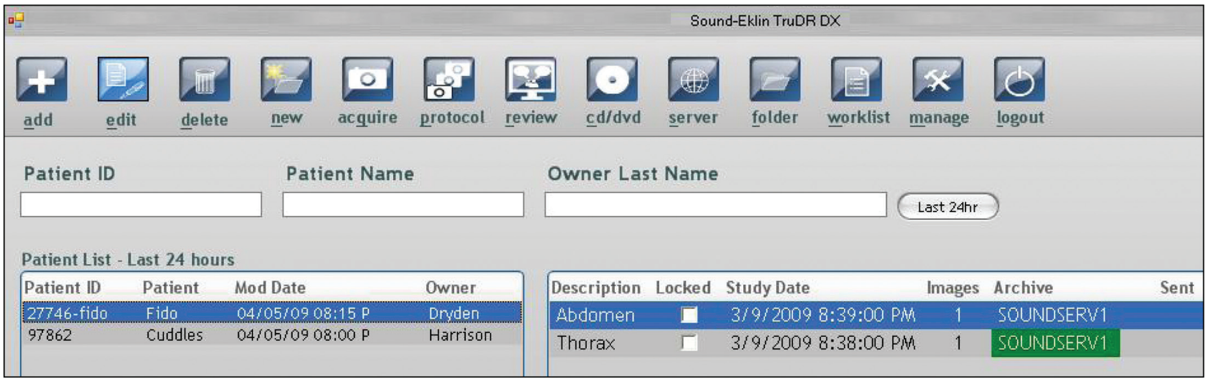
Save		Saves the current patient and returns you to the Patient Screen
Save + Add		Saves the current patient and creates a new patient
Save + Acquire		Saves the patient and prepares the computer to acquire a radiograph.



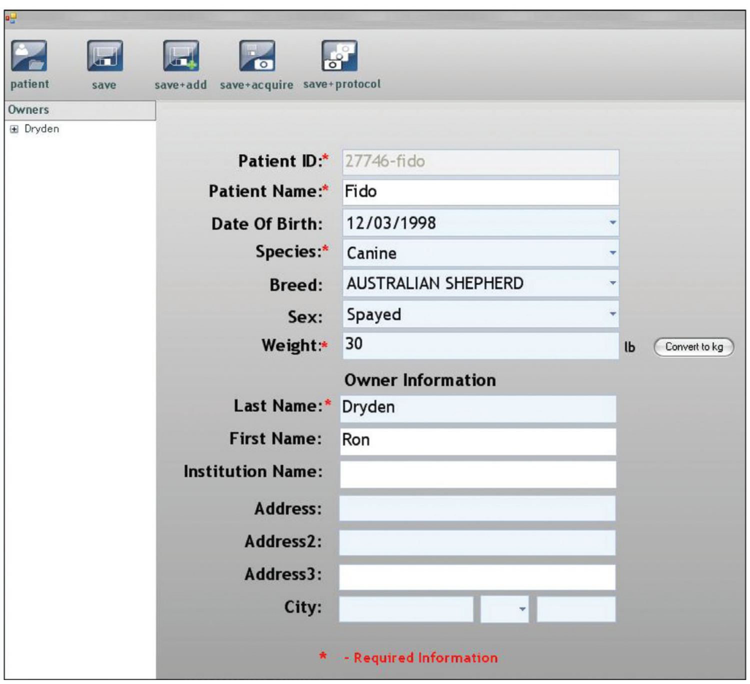
Editing an Existing Patient's Information

Edit an existing patient's information for future DICOM tagging.

1. Select your patient to edit from the Patient Screen.
2. Click the **Edit** button. 



3. Edit the information as needed.
4. Click an appropriate **Save** button (see page 5).

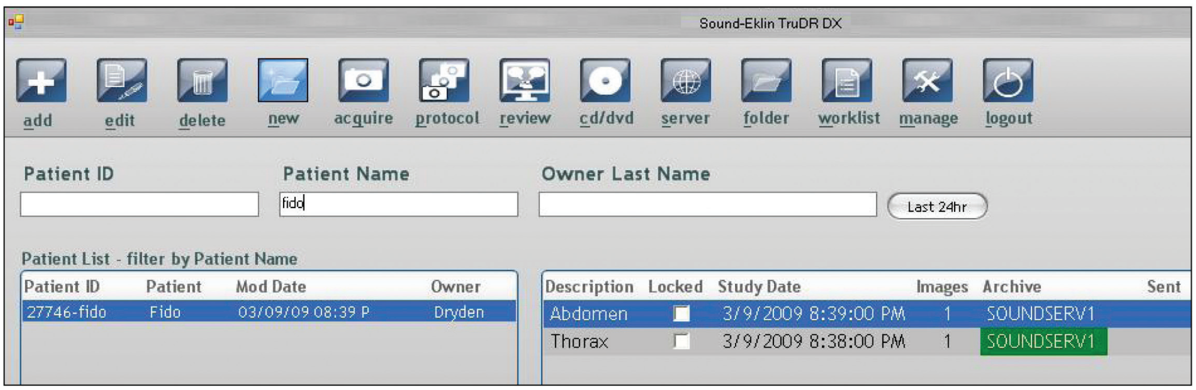


Chapter 2: Patient Information *(continued)*

Creating a New Study for an Existing Patient

Create a new study in a patient previously entered in **TruDR dx™**.

1. Search for your patient in the Patient Screen by entering the **Patient ID**, the **Patient Name**, or the **Owner Last Name**.
   The Patient List will automatically filter as you type.
2. Select your patient by clicking on the name in the **Patient List**.
3. Click the **New** button  to create a new study.
4. Select the anatomy and the view from the Anatomy Screen (see Chapter 4).

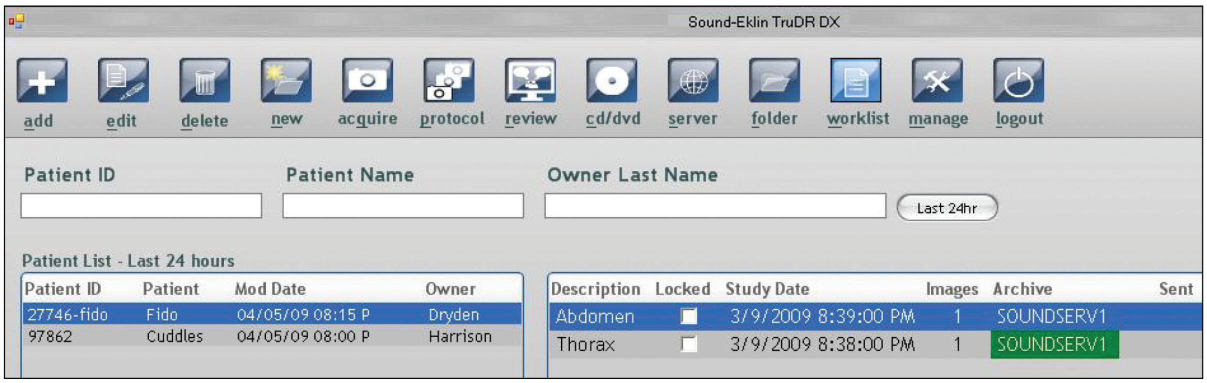


Chapter 3:

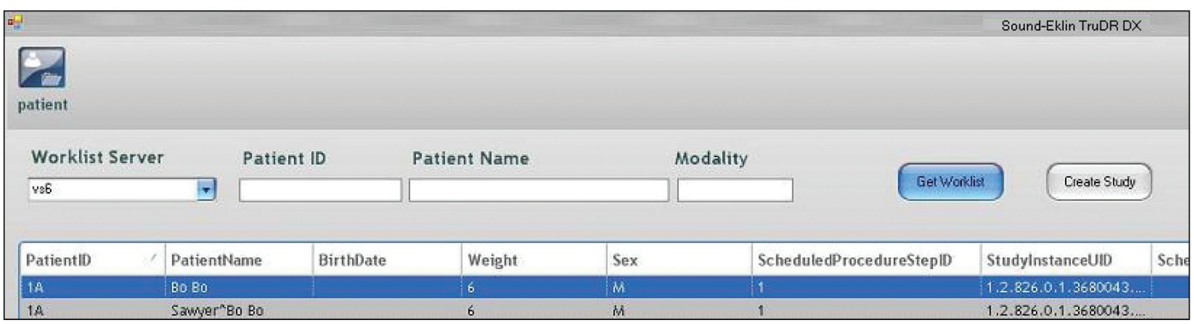
Creating a Study Using Modality Worklist

Use Practice Management Software to send the information via Modality.

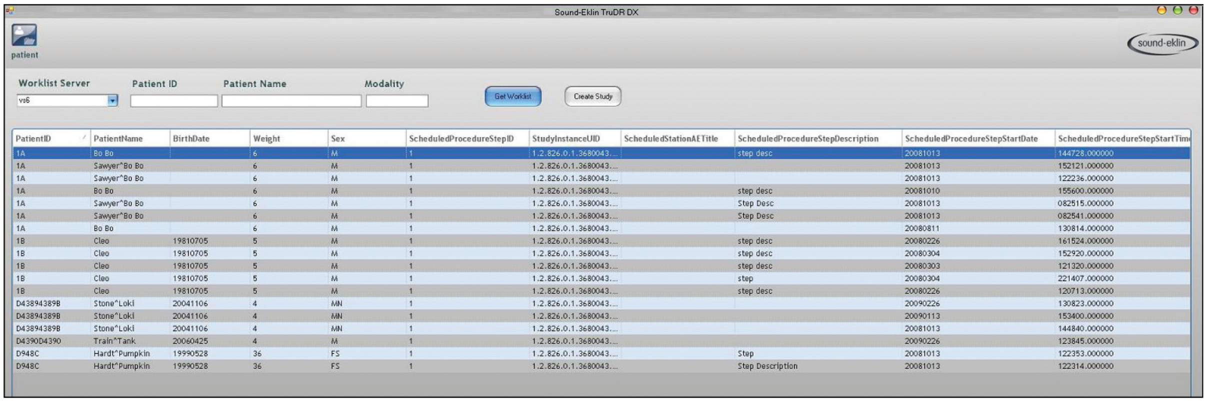
1. Use your Practice Management Software to create a modality worklist.
2. In **TruDR dx™**, click the **Worklist** button on the Patient Screen. 



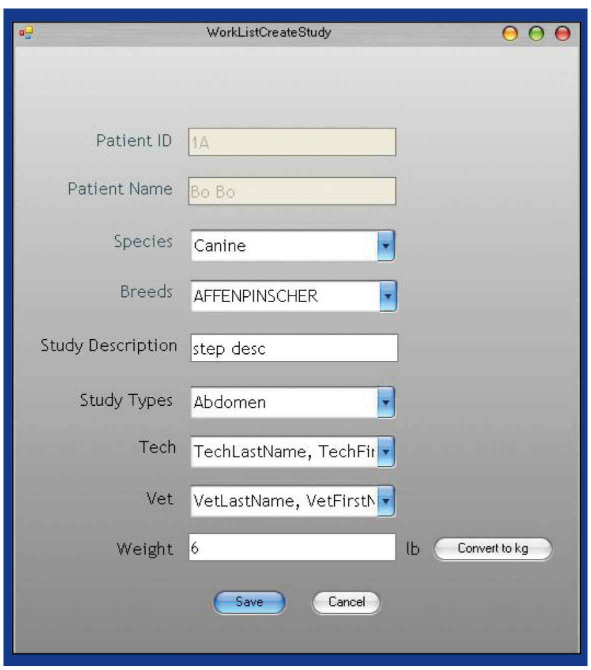
3. Click the **Get Worklist** button to populate a list of all patients sent from your Practice Management Software. You can also search for a patient by entering the patient's information and clicking the **Get Worklist** button.

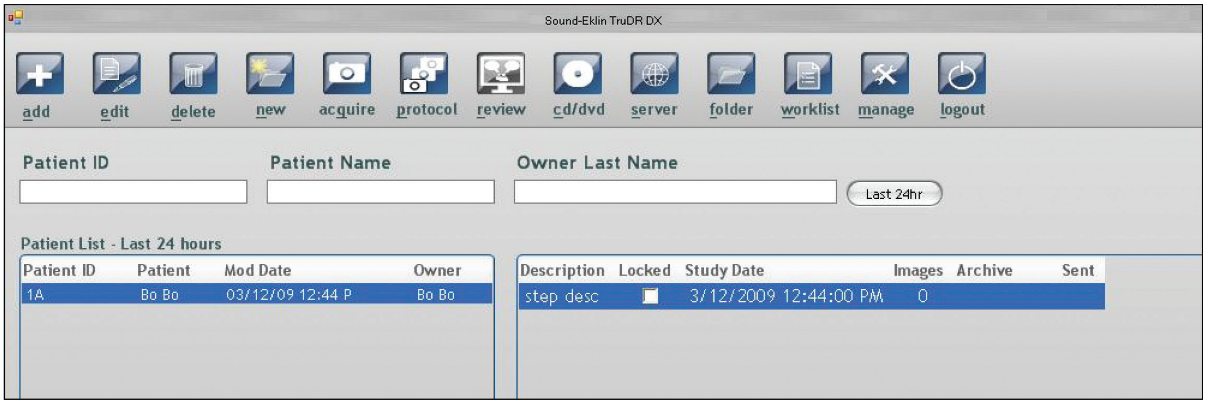


4. Select your patient from the populated list.



5. Click the **Create Study** button.
6. Fill in any additional information for your patient in the Work List Create Study dialogue box.
7. Click the **Save** button.
8. Click the **Patient**  button to return to the Patient Screen.

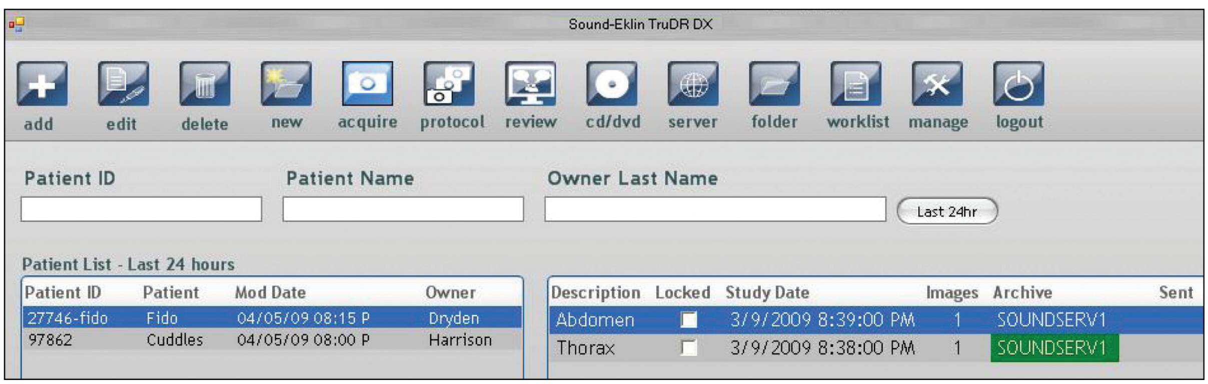




9. Select your patient and their study from the Patient Screen.

> ***The number of images in the study reads "0" since no images have been captured.***

10. Click the **Acquire** button to begin acquiring radiographs (see pages 12-14).



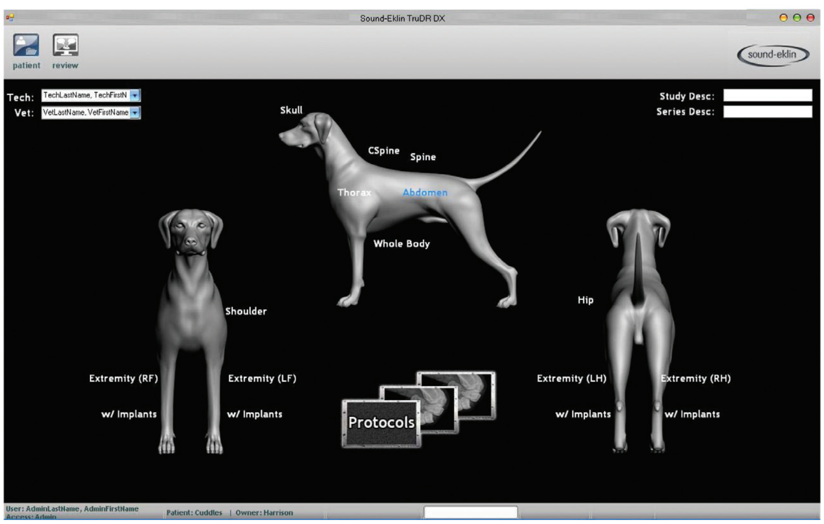
Chapter 4: Creating Radiographs

Choosing Anatomy and Positioning

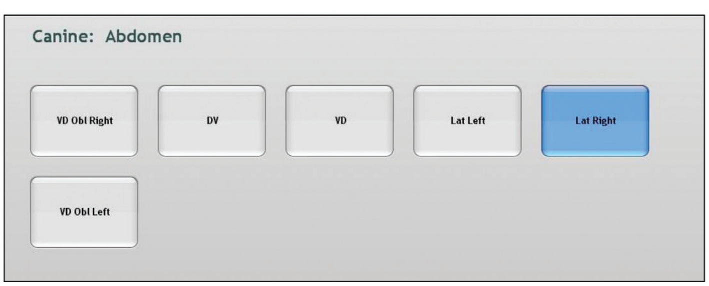
Choose the anatomy and positioning to automatically enhance and position your radiograph.

1. Select the **Tech** and ordering **Vet** from the drop-down menus.

2. Select the appropriate anatomy by clicking on the corresponding text.
   This will bring you to the Views Screen.



3. Click on the appropriate view button for your shot.
   This will bring you to the acquisition screen.



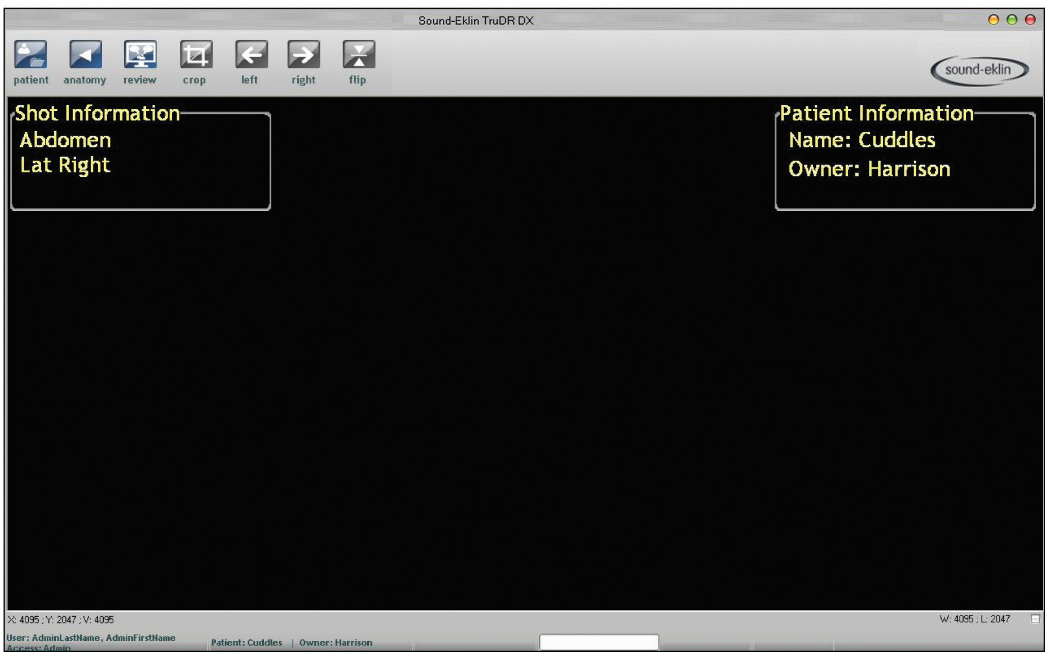
Acquiring Radiographs

1. Set the X-ray machine according to the Sound-Eklin™ Technique Chart using the appropriate KVP and mAs.

Due to variations between x-ray generators, optimal techniques may vary somewhat from the values printed on the Sound-Eklin™ Technique Chart.

2. Place the patient on the table with the desired anatomy in the center of the light field cross hairs.
3. Press the foot pedal to prep and to expose the X-ray machine.

Proper Two-Stage Foot Pedal Technique
1. To Prep, press the foot pedal halfway down.
2. Wait until the Generator is ready to fire.
3. To expose, press the foot pedal completely down.

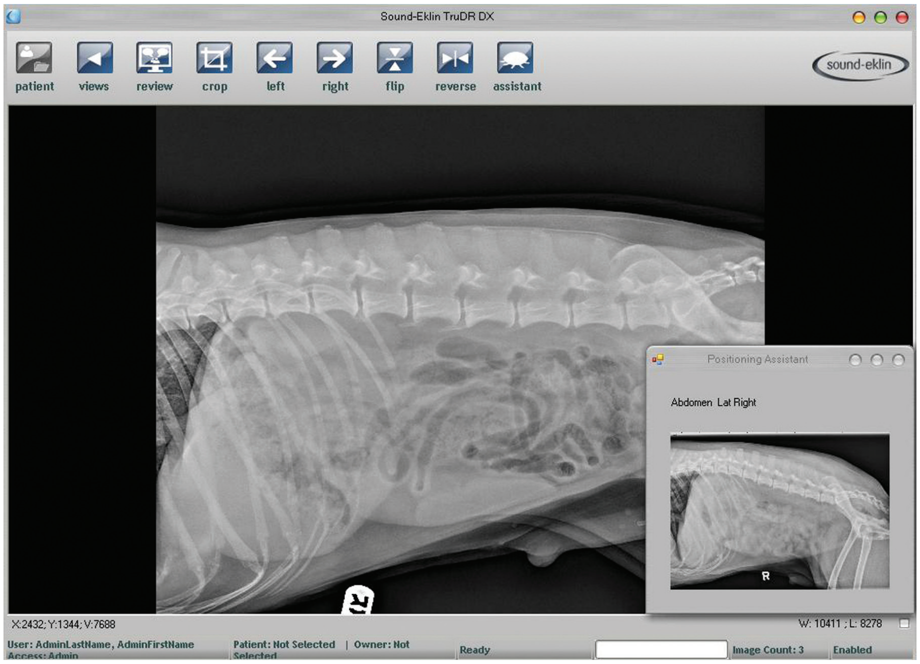


4. The image will appear shortly. Use the **Left**, **Right**, **Flip**, and **Reverse** buttons to make orientation adjustments before shooting your next shot.

Chapter 4: Creating Radiographs

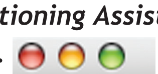
Acquiring Radiographs *(continued)*

5. After image acquisition, the Positioning Assistant displays in the lower right corner of the screen.



6. The pop-up window lists the anatomy and view, and shows whether the image is optimally displayed.

Click and drag to relocate the Positioning Assistant pop up window.

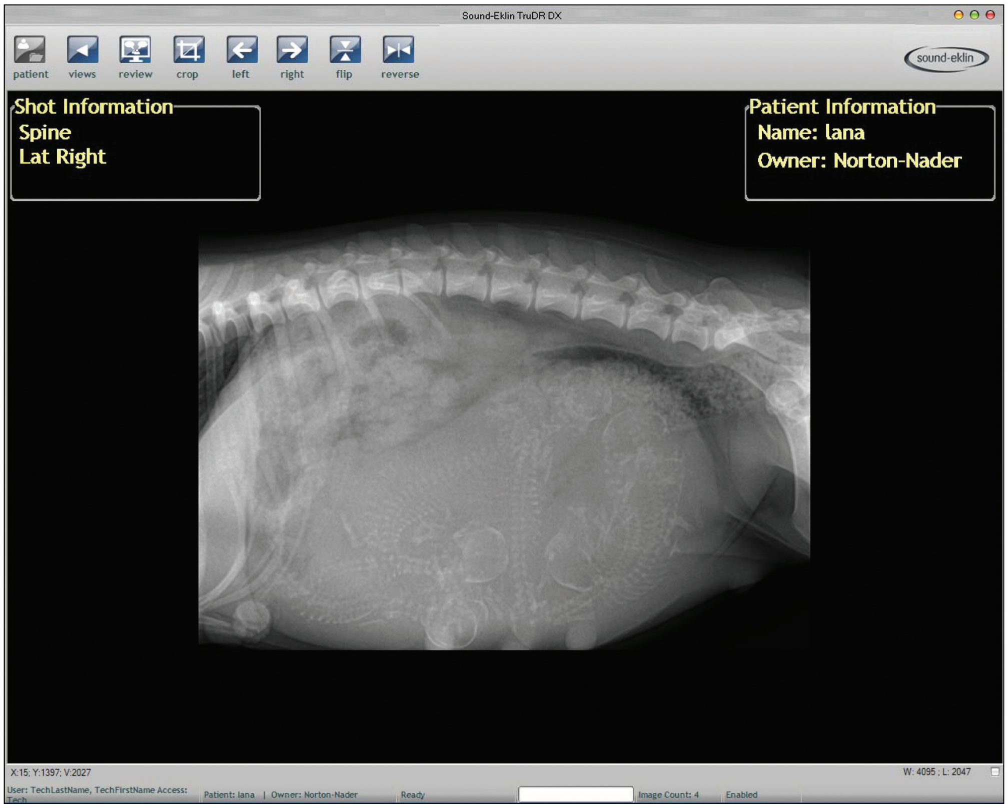
Click the yellow button to minimize the Positioning Assistant, the green to maximize, and the red to close. 

Select the assistant button to toggle Positioning Assistant off/on (Enable/Disable). 

Crop your image as needed (see pages 15-16).
If you need to reshoot your X-ray, press the foot pedal and fire again.

Chapter 4: Creating Radiographs

Acquiring Radiographs *(continued)*



7. Click the **Views** button  to change views.
8. Select your next view from the Views Screen. Click the **Anatomy** button from the Views Screen if another anatomy is needed (see page 11).

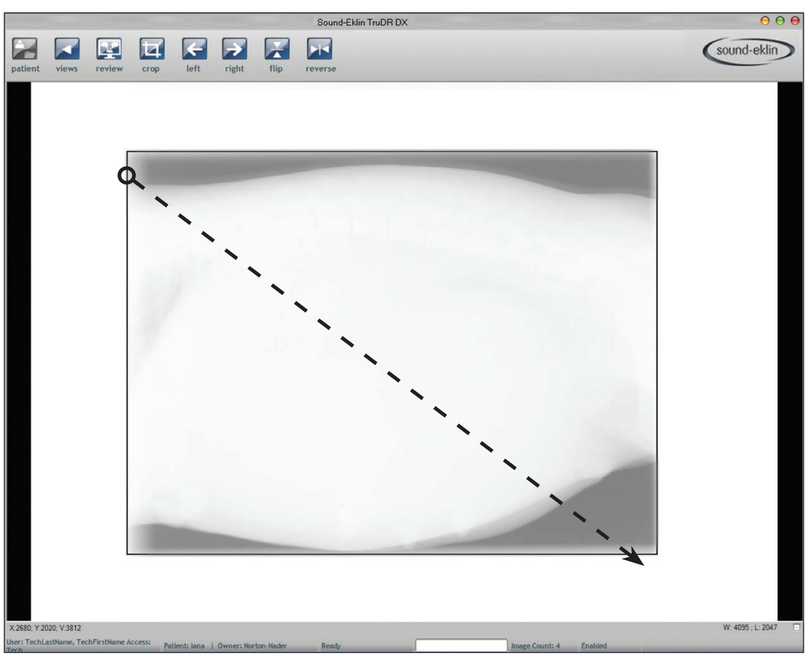
Cropping a Radiograph

Crop out unwanted portions of your radiograph.

1. Click the **Crop** button  in the Acquisition Screen.

The new image will appear lighter after clicking the crop button. The image will enhance once the cropping is complete.

2. Frame the desired image by holding the left mouse button in the upper left corner of the image and dragging to the lower right hand corner.

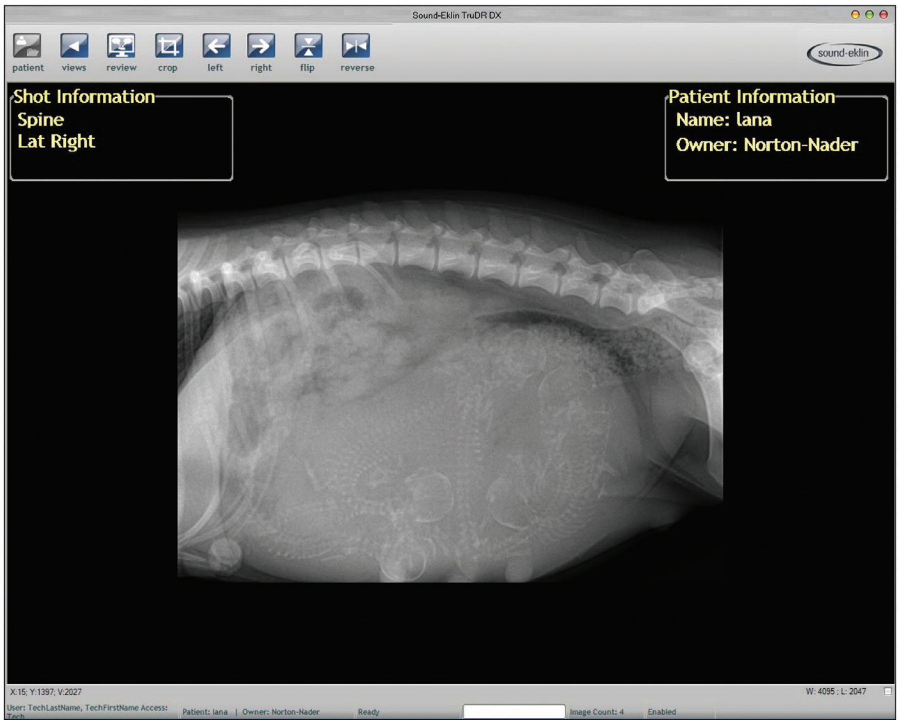


Chapter 4: Creating Radiographs

Cropping a Radiograph *(continued)*

Click and drag your mouse by starting at the circle and dragging down toward the arrow. The arrow will not appear in the actual software.

3. The image will enhance once it is cropped.



4. Re-crop your image if necessary before taking your next radiograph.

Images must be cropped before shooting the next image.

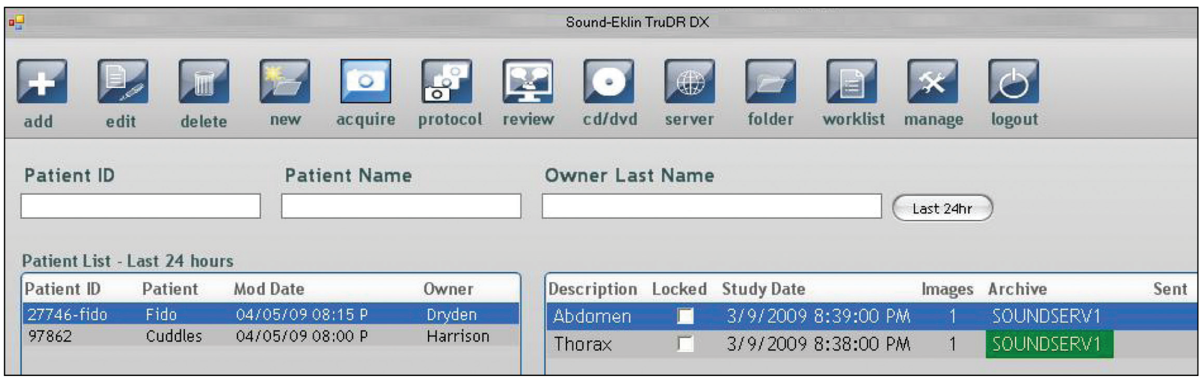
Chapter 5: Managing Studies

Adding New Images to an Existing Study

Add new images to an existing patient's study.

1. Search for your patient in the Patient Screen by entering the **Patient ID**, the **Patient Name**, or the **Owner Last Name.** The Patient List will automatically filter as you type.
2. Click the **Acquire** button. 

This will take you to the Views Screen using the anatomy you selected from the original study. This is shown in the Description field.



3. Select a view and acquire your images (see page 12).

Previous shots will load in the thumbnail pane on the left side of the Review Screen. New shots will appear at the bottom.

Chapter 5: Managing Studies *(continued)*

Reviewing a Study

Change the layout or delete any unwanted images before your study is archived on the Server.

1. Select a thumbnail in the left-hand pane to load the image into the review pane on the right. The selected image is highlighted by a yellow box.
2. Click the **Delete** button to remove any unwanted images.

   Deleting an image permanently removes it from the computer.

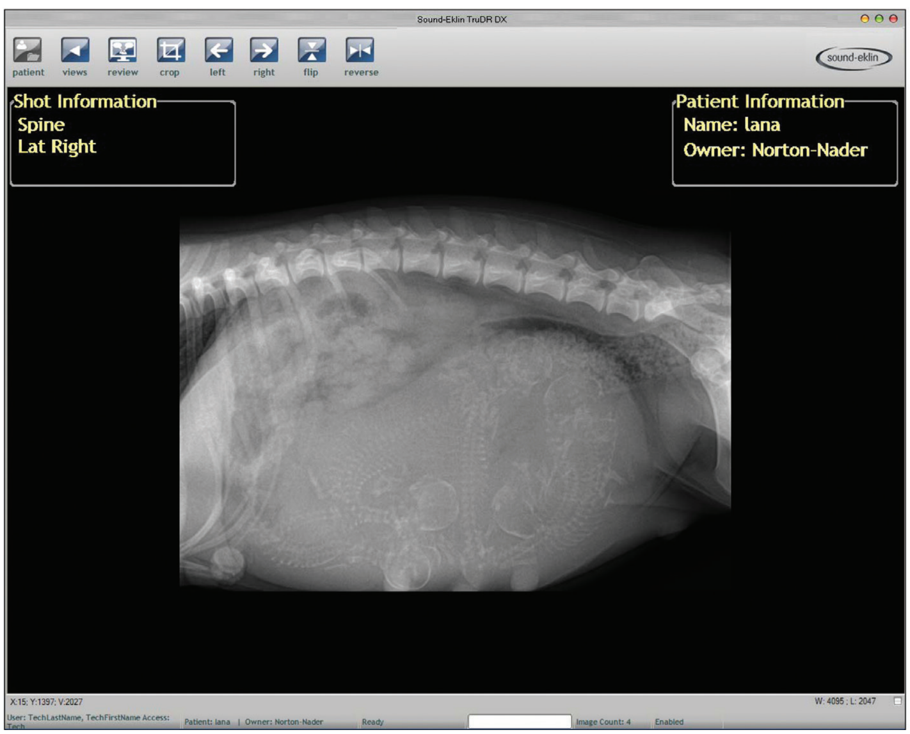
3. Review the images by using the following techniques:

   Zoom: Roll the mouse wheel forward and back.

   Pan: Click and hold the left mouse button and move the mouse.

   Window Level: Click and hold the right mouse button, then move the mouse diagonally across the image.

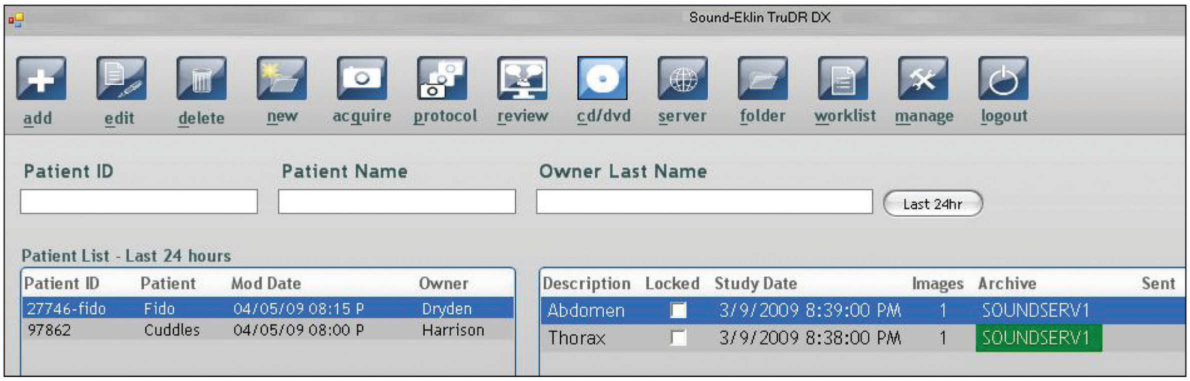
4. Click the **Patient** button to end your study and transfer the X-rays to a Review Station/ Server. The software will return you to the Patient Screen.



Burning a CD

Burn a copy of a study to a CD.

1. Search for your patient in the Patient Screen by entering the **Patient ID**, the **Patient Name**, or the **Owner Last Name.** The Patient List will automatically filter as you type.
2. Select your patient and your study. Your patient and study are highlighted in a blue box.
3. Click the **CD/DVD** button. 



4. Select an image format from the **Export As** drop-down menu.

DICOMDIR	*DICOM images require a DICOM viewer*
JPEG	*JPEG images can be viewed on any computer*

5. Click the Add DICOM Viewer check box if you selected the DICOM/DIR option from Step 4 above.

The options are unchecked by default

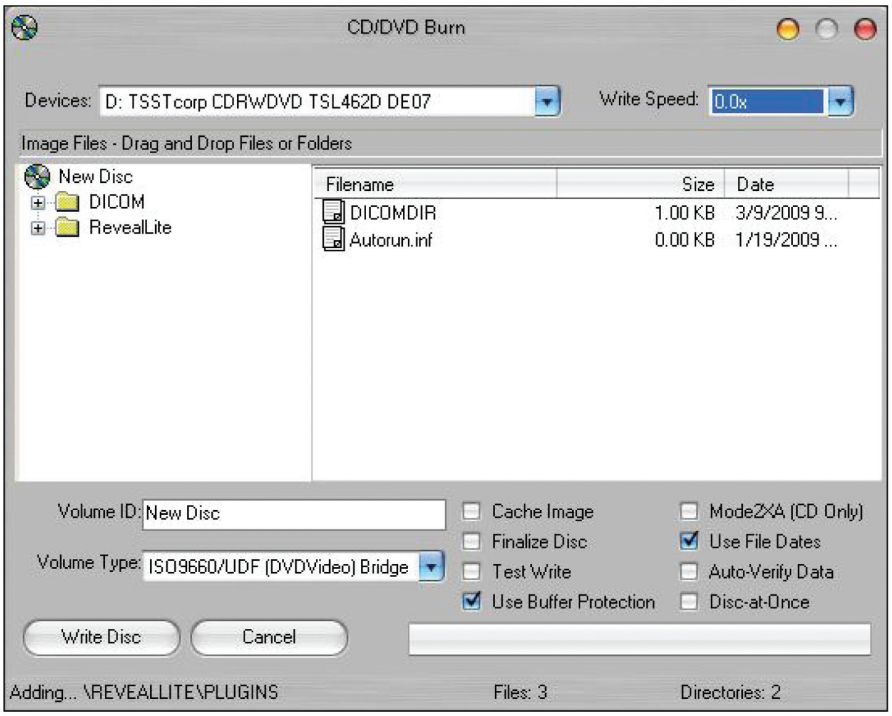
Annotation Burning	*Imprints annotations made to saved images*
Anonymize Images	*Strips all client and clinic information from the images*
Repository Format	*Places images in an equestrian repository folder format*
Add DICOM Viewer	*Adds a DICOM viewer to view the images on a computer*

6. Click the **Select** button.

Burning a CD *(continued)*

7. Insert a blank CD (CD-R or CD-RW) into the computer.
8. Click the **Write Disc** button.

The CD burn progress is shown in the lower right hand corner. You will be prompted to remove the disc when the burn is finished.



9. Click the **OK** button to complete writing the CD and remove the CD from the CD-Rom.

Exporting a Study as a JPEG

Export images from a study to a JPEG format.

1. Select your patient and your study to export from the Patient Screen.
2. Click the **Folder** button. 

3. Select the JPEG image format from the **Export As** drop-down menu.
4. Select an **Overlay Burning** option from the drop-down list.

The default option is set to None

None	***Shows no overlays on JPEG image***
Detail	***Shows a detailed DICOM overlay on the JPEG image (shows image number, anatomy, technique, hospital, vet, patient, client, species, DOB, sex, acquisition date)***
Summary	***Shows a summary DICOM overlay on the JPEG image (shows anatomy, view, laterality, hospital, vet, patient, client, species, DOB, sex, acquisition date)***

Chapter 5: Managing Studies

Exporting a Study as a JPEG *(continued)*

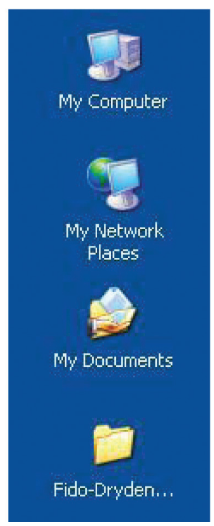
5. Check any additional options boxes you want to add to your images.

The options are unchecked by default

Annotation Burning	***Imprints annotations made to saved images***
Anonymize Images	***Strips all client and clinic information from the images***
Repository Format	***Places images in an equestrian repository folder format***

6. Click the **Select** button.
7. Select a location to save your images in.

Your images are saved to a selected location in a folder with the animals name and the clients last name (e.g. Fido-Smith).

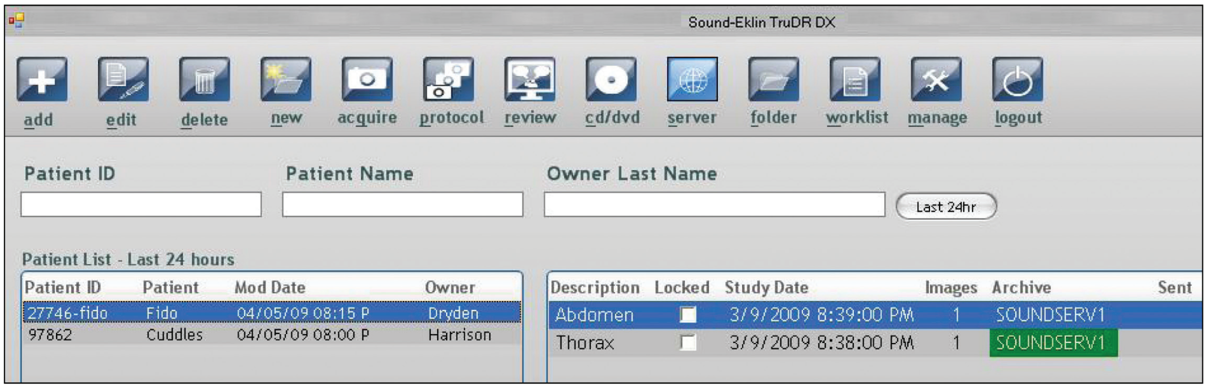


Chapter 5: Managing Studies *(continued)*

Sending a Study to a Server

Send a study to a DICOM server.

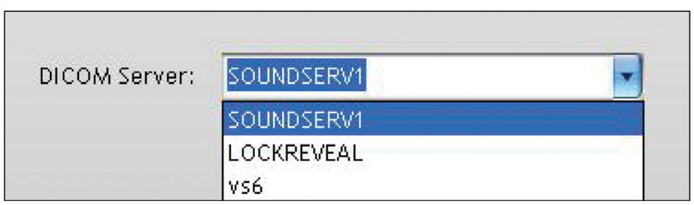
1. Search for your patient's study by entering the **Patient ID**, the **Patient Name**, or the **Owner Last Name**. The text will automatically filter as you type.
2. Select your patient by clicking on the name in the **Patient List** field.
3. Click the **Server** button.



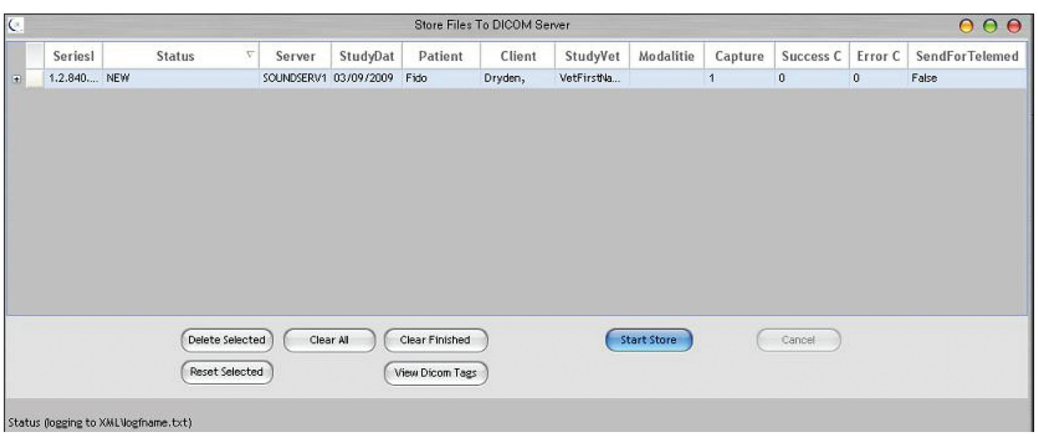
4. Select a **DICOM Server** from the drop-down list.

DICOM server information will be provided by the recipient.

5. Click **Select**.



6. Click the **Start Store** button to begin the DICOM image transfer.



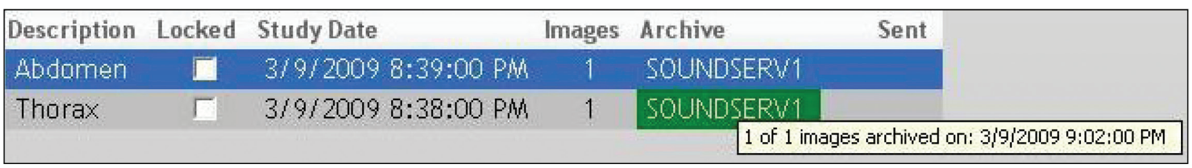
Confirming that a Study was Sent

Confirm your study successfully auto routed to the Server.

1. Finish your study by returning to the Patient Screen.
   The Archive field will show a server name (e.g. SOUNDSERV1).
2. Hold the mouse over the server name to show a pop-up window with the transfer data.

The pop-up box tells you how many images have been transferred and the date and time of the transfer. The information is color coded for easy reference. If only one study appears, it will be highlighted blue and the color coding will not appear:

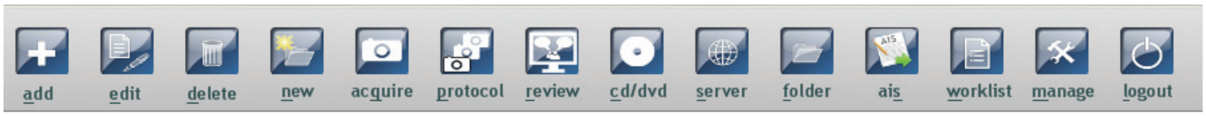
Green Box *Image transfer complete*
Red Box *Image transfer incomplete or failed*



Sending a Study to AIS

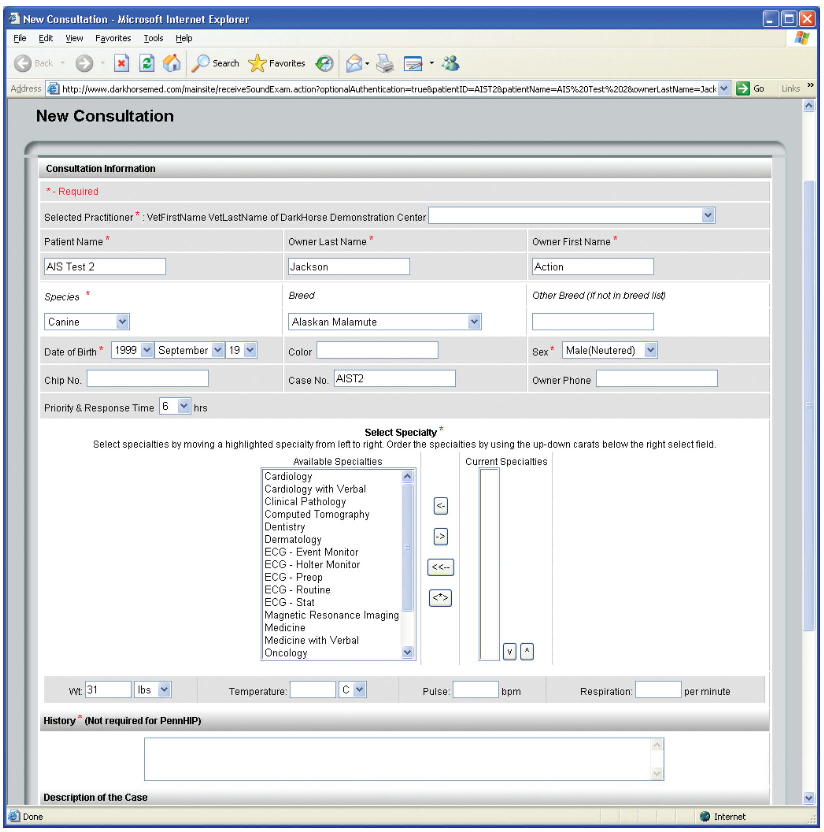
Send a telemedicine study to AIS.

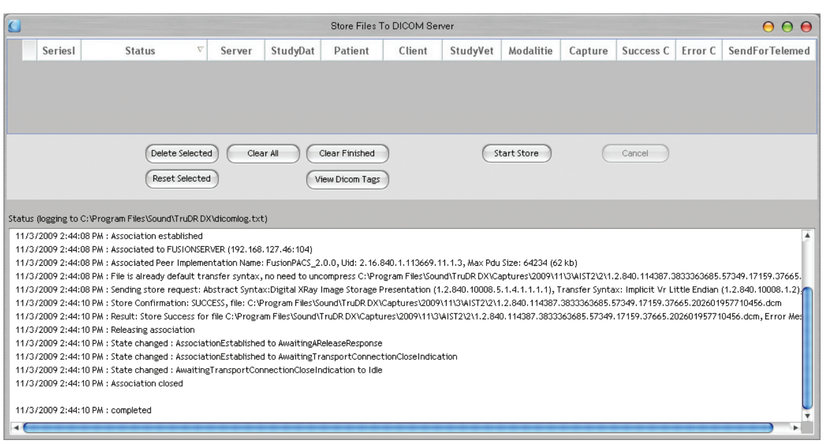
1. Select the patient you want from the **Patient List** field and click the **AIS** button from the toolbar.



Once you have clicked the AIS button the images are automatically sent to AIS and a New Consultation window is launched.

2. Fill in all the required information on the **New Consulation** window and click **Submit**.





Appendix A: Technical Support

Shipping Address

Sound-Eklin™

5817 Dryden Place, Suite 101

Carlsbad, California 92008

USA

Technical Support

Office hours: Weekdays 8:00 A.M. — 5:00 P.M. Pacific Time

Emergency 24-hour support is available.

Telephone: 800-268-5354 option 3

Website

www.soundeklin.com

Sound-Eklin™ Technical Support
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Carlsbad, California 92008 USA

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